

## X-RAY TUBE CATHODE CUP STRUCTURE FOR FOCAL SPOT DEFLECTION

### Abstract of the Disclosure

A cathode assembly (18, 216) for an x-ray tube (1) includes a base (60, 220) to which a filament (66) is mounted. A pair of deflectors (82, 84) are carried by the base for deflecting a beam (A) of electrons generated by the  
5 filament. Metal tubes (130, 132) are mounted in bores (106) of insulator blocks (104, 105). Metalized ends (150) of the insulator blocks are brazed into bores (122, 222, 224) in the base. A rod (130, 132) attached to the deflector is  
10 slid into the tube and the deflector's position and alignment are gauged and accurately set. The rod and tube are crimped to set the deflector position then welded.